TITLE: SIMD SUPPORTING FILTERING IN A VIDEO DECODING SYSTEM

INVENTOR: MACINNIS
APPLICATION NO.: UNASSIGNED,
CONF. NO. ; DOCKET NO. 13398US02
ATTORNEY: JAW, PHONE: 312-775-8000

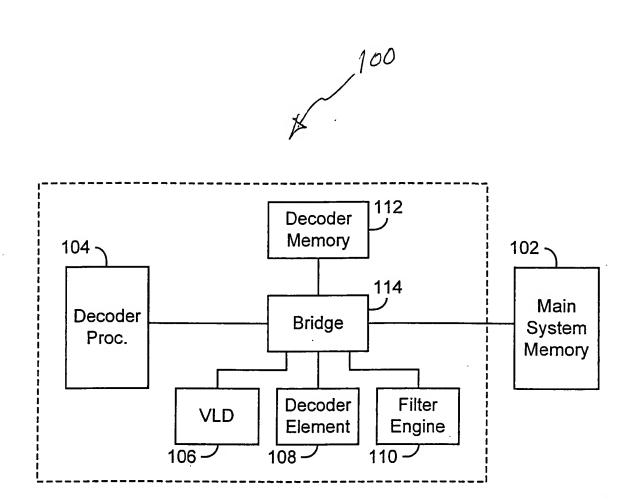


FIG. 1

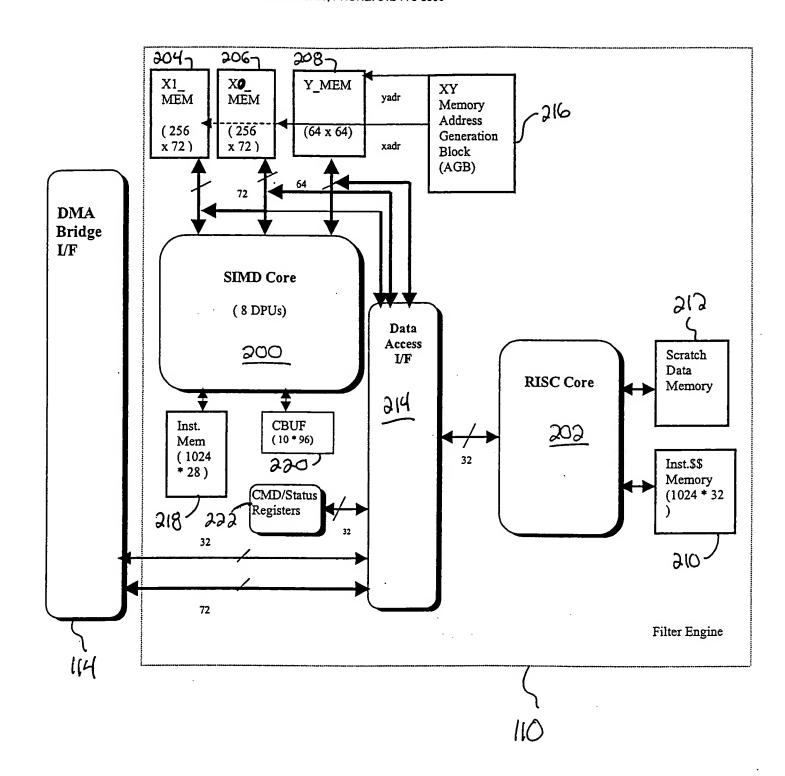


FIG. 2

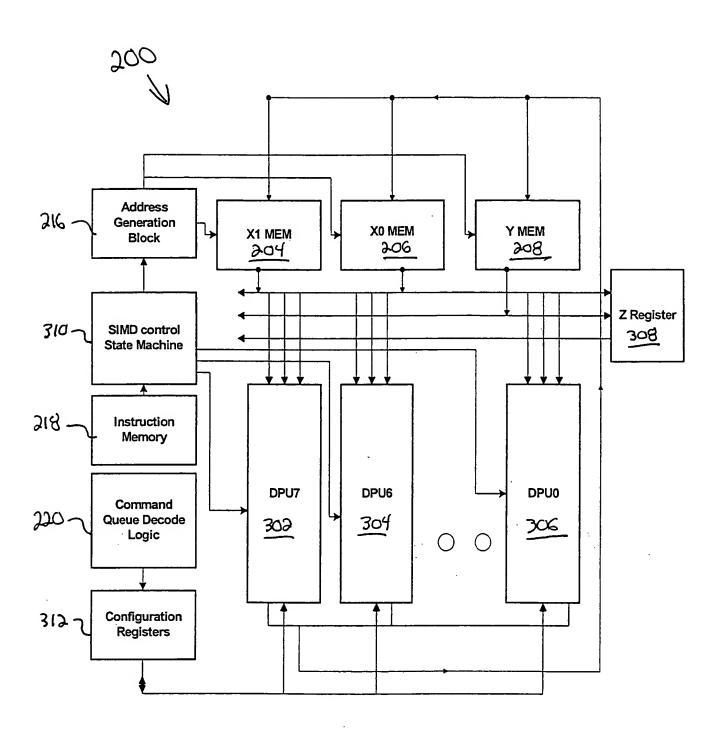


FIG. 3

TITLE: SIMD SUPPORTING FILTERING IN A VIDEO DECODING SYSTEM **INVENTOR: MACINNIS** APPLICATION NO.: UNASSIGNED, CONF. NO. ; DOCKET NO. 13398US02 400 ATTORNEY: JAW, PHONE: 312-775-8000 From XMEM From REGZ From YMEM 404 Xreg Yreg 16 16 (16) (9) Multiplier 406 Areg Breg 804 410 24 412 Test ADD/SUB Condition 24 414 Testing Cond. Regs Acc Regs 24 To control X/YMEM's write enable (word 418 enable) Rounding/ Saturation To X/YMEM Truncating

FIG. 4

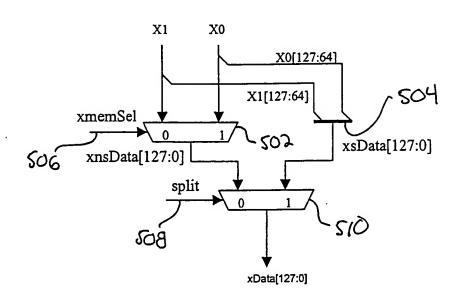


FIG. 5

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INVENTOR: MACINNIS

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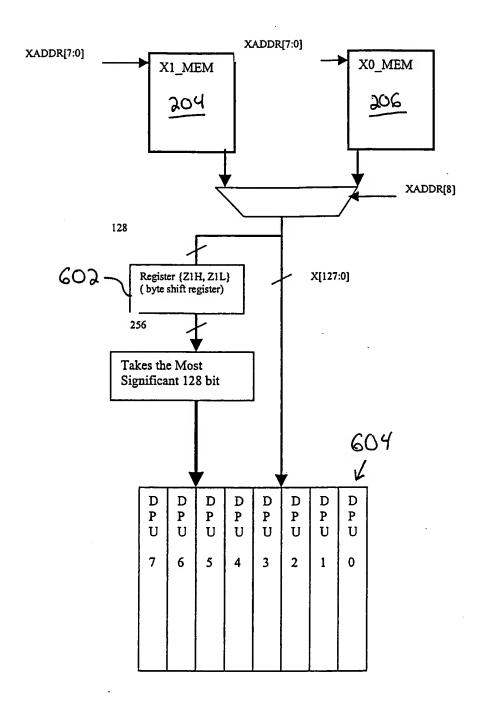


FIG. 6

TITLE: SIMD SUPPORTING FILTERING IN A VIDEO DECODING SYSTEM APPLICATION NO.: UNASSIGNED, CONF. NO. ; DOCKET NO. 13398US02 DOCKET NO. 13398US02

ATTORNEY: JAW, PHONE: 312-775-8000

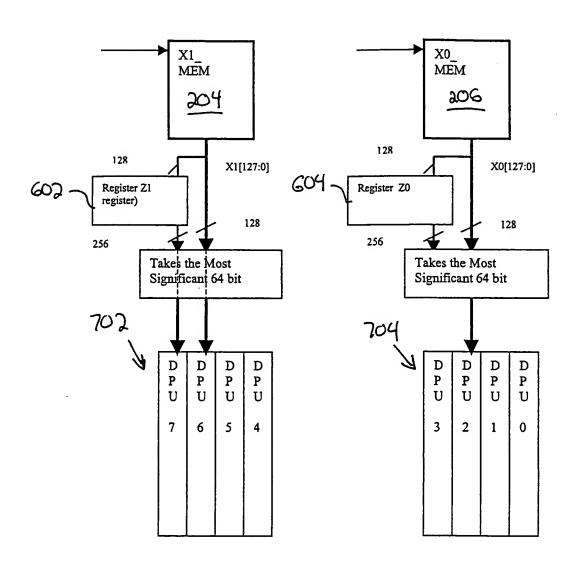


FIG. 7

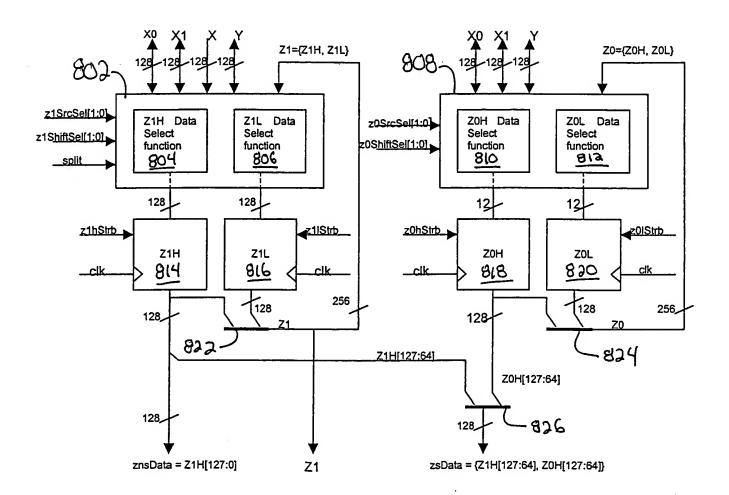


FIG. 8

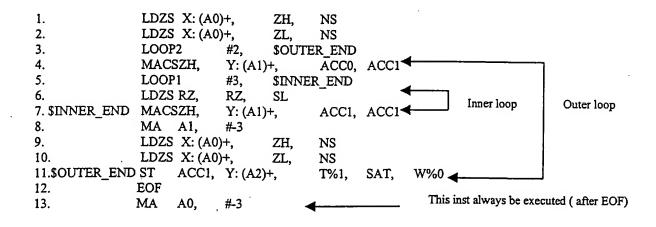


FIG. 9

LDZS	LDZS	LDZS	LDZS	LDZS			clk 8 💉							
<u> </u>	LDZS	LDZS	LDZS	LDZS	LDZS								<u> </u>	<u> </u>
		Loop2	Loop2	Loop2	Loop2	Loop2								
			Macs	Macs	Macs	Macs	Macs							
				Loop1	Loopl	Loopl	Loopl	Loop1						
					LDZS	LDZS	LDZS	LDZS	LDZS					
						Macs	Macs	Macs	Macs	Macs				
							LDZS	LDZS	LDZS	LDZS	LDZS			
								Macs	Macs	Macs	Macs	Macs		
									LDZS	LDZS	LDZS	LDZS	LDZS	Γ
										Macs	Macs	Macs	Macs	Macs

MA	MA	MA	MA	MA										
	LDZS	LDZS	LDZS	LDZS	LDZS									
	1	LDZS	LDZS	LDZS	LDZS	LDZS						İ		
			ST	ST	ST	ST	ST							Ι
				Macs	Macs	Macs	Macs	Macs						L
					Loopl	Loop1	Loopl	Loopl	Loopl					
						LDZS	LDZS	LDZS	LDZS	LDZS				
							Macs	Macs	Macs	Macs	Macs			
								LDZS	LDZS	LDZS	LDZS	LDZS		
									Macs	Macs	Macs	Macs	Macs	
										LDZS	LDZS	LDZS	LDZS	LDZ

Macs	Macs	Macs	Macs	Macs							INST= (PC=0), if there is no executable function available in the
	MA	MA	MA	MA	MA						queue;
		LDZS	LDZS	LDZS	LDZS	LDZS			1	<u> </u>	INST= the 1 st inst of next executable
			LDZS	LDZS	LDZS	LDZS	LDZS				function, if there is executable function
				ST	ST	ST	ST	ST			available in the Que.
					EOF	EOF	EOF	EOF	EOF		
						MA	MA	MA	MA	MA	
							INST	INST	INST	INST	INST
				i							
										is "updat the "upd	f the 1st cmd in the queue te A0 with "wait" option", ate A0" command over previous MA's result.